

ABSTRACT OF THE DISCLOSURE

A catalyst degradation determining apparatus calculates a maximum oxygen storage amount of a first catalyst provided in an exhaust pipe, and calculates the temperature of the catalyst occurring during the period of calculation of the maximum oxygen storage amount (calculation period catalyst temperature). On the basis of the maximum oxygen storage amount acquired when the calculation period catalyst temperature is in a predetermined temperature range (learning temperature range), a present-time characteristic value of the first catalyst is determined. If a maximum oxygen storage amount is calculated when the calculation period catalyst temperature is in a temperature range outside the learning temperature range, the apparatus corrects (normalizes) the calculated maximum oxygen storage amount to a maximum oxygen storage amount that is expected to be acquired when the calculation period catalyst temperature is equal to a predetermined temperature (normalization temperature), on the basis of the calculation period catalyst temperature at the time of calculation of the maximum oxygen storage amount, and the characteristic value. On the basis of a result of comparison of the post-normalization maximum oxygen storage amount with a catalyst degradation criterion value, the apparatus determines whether the catalyst has degraded.